



Source Water Assessment Program (SWAP) Report For Inter All Corporation

What is SWAP?

The Source Water Assessment Program (SWAP), established under the federal Safe Drinking Water Act, requires every state to:

- ? Inventory land uses within the recharge areas of all public water supply sources;
- ? Assess the susceptibility of drinking water sources to contamination from these land uses; and
- ? Publicize the results to provide support for improved protection.

SWAP and Water Quality

Susceptibility of a drinking water source does *not* imply poor water quality. Actual water quality is best reflected by the results of regular water tests.

Water suppliers protect drinking water by monitoring for more than 100 chemicals, treating water supplies, and using source protection measures to ensure that safe water is delivered to the tap.

Prepared by the
Massachusetts Department of
Environmental Protection,
Bureau of Resource Protection,
Drinking Water Program

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February 11, 2002

Table 1: Public Water System (PWS) Information

<i>PWS NAME</i>	Inter All Corporation			
<i>PWS Address</i>	31 West Street			
<i>City/Town</i>	Granby, Massachusetts			
<i>PWS ID Number</i>	1111017			
<i>Local Contact</i>	Mr. Gino Maggi			
<i>Phone Number</i>	413-467-7181			

<i>Well Name</i>	<i>Source ID#</i>	<i>Zone I (in feet)</i>	<i>IWPA (in feet)</i>	<i>Source Susceptibility</i>
Well #1	1111017-01G	100	405	Moderate

Introduction

We are all concerned about the quality of the water we drink. Drinking water wells may be threatened by many potential sources of contamination, including septic systems, road salting, and improper disposal of hazardous materials. Citizens and local officials can work together to better protect these drinking water sources.

Purpose of this report:

This report is a planning tool to support local and state efforts to improve water supply protection. By identifying land uses within water supply protection areas that may be potential sources of contamination the assessment helps focus protection efforts on appropriate best management practices (BMPs) and drinking water source protection measures. Department of Environmental Protection (DEP) staff are available to provide information about funding and other resources that may be available to your community.

This report includes:

1. Description of the Water System
2. Discussion of Land Uses within Protection Areas
3. Recommendations for Protection
4. Attachments, including a Map of the Protection Areas

1. Description of the Water System

The Inter All Corporation is a small manufacturer of pressure sensitive (glue-on) and iron-on embroidered emblems located in Granby. New, computer guided sewing machines were installed within the last year. The older machines, that utilized machine oils, although still on site, are no longer utilized. The facility currently employs approximately 20 people and is served by a single groundwater supply well #1. Currently available data indicate the well is a 10-inch diameter, 240 feet deep bedrock well with an estimated yield of approximately 37 gpm. The Zone I and Interim Wellhead Protection Area (IWPA) radii are 100 feet and 405 feet, respectively based on the maximum water use determined from metered water volumes. The Zone I is the

What is a Protection Area?

A well's water supply protection area is the land around the well where protection activities should be focused. Each well has a Zone I protective radius and an Interim Wellhead Protection Area (IWPA).

- **The Zone I** is the area that should be owned or controlled by the water supplier and limited to water supply activities.
- **The IWPA** is the larger area that is likely to contribute water to the well.

In many instances the IWPA does not include the entire land area that could contribute water to the well. Therefore, the well may be susceptible to contamination from activities outside of the IWPA that are not identified in this report.

protected area immediately surrounding the wellhead while the IWPA provides an interim protection area for a water supply well when the actual recharge area has not been delineated. The actual recharge area to the well may be significantly larger or smaller than the IWPA.

There is a sanitary sewer line on Route 202 and a Town sewer easement through the Zone I of Inter All Corp.'s well connecting the neighborhood north of the facility. Inter All Corp. and all of the residential homes within the IWPA are connected to the sewer. We were unable to determine if the sewer is double lined. Inter All Corp. has converted fully to natural gas and has removed the aboveground oil tank. The building housing Inter All Corp. had previously housed a dry cleaner and had a confirmed release of hazardous materials. However, a Class C, Release Action Outcome (RAO) Statement has been filed for the site. In addition, there is a gasoline station located south and east of Inter All Corp. on Route 202 that is a confirmed release site. That station is located outside of the IWPA and appears to be located hydraulically downgradient from the Inter All Corp. Contact the Department's Bureau of Waste Site Cleanup for additional information about these sites.

The well is located within an area mapped as sand and gravel overburden of unknown depth. The wellhead is approximately 24-inches above grade and the ground around the wellhead is graded to prevent ponding. There is no record of a confining, protective clay layer in the vicinity of the well. The bedrock is mapped as sedimentary sandstones (Mesozoic red beds) of the Jurassic Period. Wells located in these geological conditions are considered to have a high vulnerability to contamination due to the absence of hydrogeologic barriers that can prevent contaminant migration from the surface.

The well serving the facility has no treatment at this time, although they do maintain a sediment filter. For current information on water quality monitoring results, please contact the Public Water System contact person listed above in Table 1. Please refer to the attached map of the Zone I and IWPA and Table 1 for additional information regarding the location of the well and activities within the protection areas.

What is Susceptibility?

Susceptibility is a measure of a well's potential to become contaminated due to land uses and activities within the Zone I and Interim Wellhead Protection Area (IWPA).

2. Discussion of Land Uses in the Protection Areas

There are few activities within the drinking water supply protection areas that are potential sources of contamination. Inter All Corp. has already taken measures to protect its water supply.

Key issues include:

1. **Non-conforming activities in the Zone I;**
2. **Sewer line; and**
3. **Confirmed hazardous materials/oil release site.**

Table 2: Table of Activities within the Water Supply Protection Areas

Potential Contaminant Sources	Zone I	IWPA	Threat	Comments
Sewer and pumping station (IWPA)	Yes	Yes	High	Monitor easement for evidence of leaks
Parking and transportation corridors	Yes	Yes	Moderate	Direct runoff away from the well, monitor for leaks and spills
Hazardous materials/oil confirmed release site – Gasoline station	No	No	--	Refer to Appendix A and DEP - BWSC for additional information**
Transportation corridor	No	Yes	Moderate	Establish communication with Town for emergency response.

- For more information on Contaminants of Concern associated with individual facility types and land uses please see the SWAP Draft Land Use / Associated Contaminants Matrix on DEP's website - www.state.ma.us/dep/brp/dws/.
- For more information on confirmed release sites - please see <http://www.state.ma.us/dep/bwsc/bwschome.htm>

The overall ranking of susceptibility to contamination for Inter All corporation's well is moderate, based on the presence of several moderate threat land uses or activities in the Zone I and IWPA, as seen in Table 2.

1. Non-conforming activities in the Zone I – Although the water supplier does own the entire Zone I area, there are structures and activities not related to the water supply located within the Zone I. The Zone I requirements prohibit any activity from the Zone I that is not directly related to the water supply. Please note that systems not meeting DEP Zone I requirements, must receive DEP approval prior to increasing water use or modifying systems. Structures, sewer line and parking lots are within the Zone I.

Recommendations:

- ✓ Control access to the wellhead area. Monitor for vandalism and consider installing a fence if necessary.
- ✓ Use Best Management Practices for handling chemicals and monitor vehicles used to access the area.
- ✓ Do not use/store pesticides, fertilizers or road salt within the Zone I.
- ✓ Prepare an emergency plan for responding to an accidental release. Include contact with the local authorities.
- ✓ Do not conduct any additional activities within the Zone I. Contact MA DEP prior to conducting any new or modifying any existing activities within Zone I.
- ✓ Monitor the parking area and shipping and receiving area for leaks and be sure runoff is directed away from the wellhead. Inform employees of the necessity to minimize leaks and accidental spills.

2. Sewer and pumping station – There is a sewer line within the Zone I and a sewage pumping station along Route 202 within the IWPA. It could not be ascertained whether the sewer is double lined. All of the residents and facilities in the Zone I and IWPA are connected to the sewer rather than utilizing on-site septic disposal.

Recommendation:

- ✓ Establish communication with the Town to be sure they are aware that you are a public water supplier and that the sanitary sewer is located in close proximity to your well. In this way the Town can be informed if a break occurs or if repairs are needed on the line.

Other activities noted within the Zone I and IWPA are parking and Route 202. Continue

monitoring water quality and activities within the Zone I and IWPA and establish communication with the Town regarding notification in the event of an emergency such as a break in the sewer line or an accidental release along Route 202. The Granby Pizza Palace is also located within the IWPA. The facility is connected to the municipal sewer and utilizes natural gas, although the parking lot is also within the IWPA. An electrical transformer is located on the pole in front of Inter All Corp. Contact the electrical utility to ensure that non-PCB oil is in the transformers. Continue to comply with all requirements established for the Class C RAO for the facility. Contact the Department's BWSC for information regarding the site on the south side of Route 202.

3. Protection Recommendations

Implementing protection measures and best management practices (BMPs) will reduce the susceptibility to contamination. Inter All Corporation is commended for taking measures to protect the water quality of your well such as berming the wellhead, connecting to the sewer and converting to natural gas.

Glossary

Zone I: The area closest to a well; a 100 to 400-foot radius proportional to the well's pumping rate. To determine your Zone I radius, refer to the attached map.

IWPA: A 400-foot to ½ mile radius around a public water supply well proportional to its pumping rate; the area DEP recommends for protection in the absence of a defined Zone I. To determine IWPA radius, refer to the attached map.

Zone II: The primary recharge area defined by a hydrogeologic study.

Aquifer: An underground water-bearing layer of permeable material that will yield water in a usable quantity to a well.

Hydrogeologic Barrier: An underground layer of impermeable material that resists penetration by water.

Recharge Area: The surface area that contributes water to a well.

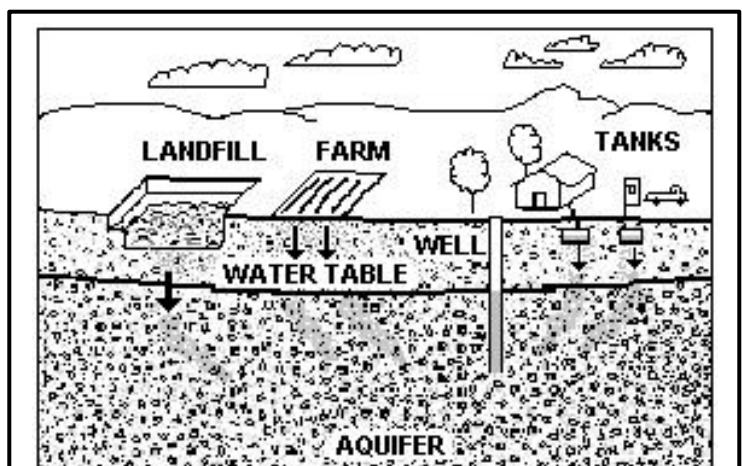


Figure 1: Example of how a well could become contaminated by different land uses and activities.

For More Information:

Contact Catherine Skiba in DEP's Western Region Office at (413) 755-2119 for more information and for assistance in improving current protection measures.

More information relating to drinking water and source protection is available on the Drinking Water Program web site at:
www.state.ma.us/dep/brp/dws/

Additional Documents:

To help with source protection efforts, more information is available by request or online at www.state.ma.us/dep/brp/dws/ including:

1. Water Supply Protection Guidance Materials such as model regulations, Best Management Practice information, and general water supply protection information.
2. MA DEP SWAP Strategy
3. Land Use Pollution Potential Matrix
4. Draft Land/Associated Contaminants Matrix

Copies of this assessment have been made available to the public water supplier and town boards.

Please review and adopt the key recommendations above and the following to further enhance the protection measures you have already taken.

Priority Recommendations:

- ✓ Monitor activities within the Zone I.

Zone I:

- ✓ Keep new non-water supply activities out of the Zone I.
- ✓ Consider well relocation if Zone I threats cannot be mitigated.
- ✓ Prohibit public access to the well by locking facilities and installing a fence if necessary, and posting signs.
- ✓ Conduct regular inspections of the Zone I and IWPA. Look for illegal dumping, evidence of vandalism, spills, etc.
- ✓ Use BMPs and control activities that could pose a threat to the water supply.
- ✓ Direct road and parking lot drainage in the Zone I away from well.
- ✓ Do not use or store pesticides, fertilizers or road salt within the Zone I.

Training and Education:

- ✓ Train staff on proper hazardous (even household type) material use, disposal, emergency response, and best management practices. Post labels as appropriate on raw materials and hazardous waste. Utilize local household hazardous waste collection days.
- ✓ Post drinking water protection area signs at key visibility locations.
- ✓ Work with your community to ensure that stormwater runoff is directed away from the well and is treated according to DEP guidance.

Facilities Management:

- ✓ Implement Best Management Practices (BMPs) for the use of fertilizer, herbicides and pesticides on facility property.
- ✓ For utility transformers that may contain PCBs, contact the utility to determine if PCBs have been replaced. If PCBs are present, urge their immediate replacement. Keep the area near the transformer free of tree limbs that could endanger the transformer in a storm.

Planning:

- ✓ Work with local officials in Granby to establish and include Inter All's IWPA in a water Supply Protection District to assist you in improving protection.
- ✓ Have a plan to address short-term water shortages and long-term water demands. Keep the phone number of a bottled water company readily available.
- ✓ Supplement the SWAP assessment with additional local information and incorporate it into water supply educational efforts. Use a land use inventory to assist in setting priorities, focusing inspections, and creating educational activities.

These recommendations are only part of your ongoing local drinking water source protection. Citizens and community officials should use this SWAP report to spur discussion of local drinking water protection measures.

4. Attachments

- Map of the Public Water Supply (PWS) Protection Area.
- Recommended Source Protection Measures Fact Sheet
- Wellhead Protection Grant Program Fact Sheet
- Source Protection Sign Order Form

5. Appendix

- A. Table of DEP Regulated Chapter 21E Hazardous Materials Release Sites

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Appendix A

Bureau of Waste Site Cleanup - Tier Classified Oil and/or Hazardous Material Sites within or proximal to the Water Supply Protection Areas

DEP's data layer depicting oil and/or hazardous material (OHM) sites is a statewide point data set that contains the approximate location of known sources of contamination that have been both reported and classified under Chapter 21E of the Massachusetts General Laws. Location types presented in the layer include the approximate center of the site, the center of the building on the property where the release occurred, the source of contamination, or the location of an on-site monitoring well. Although this assessment identifies OHM sites near the source of your drinking water, the risks to the source posed by each site may be different. The kind of contaminant and the local geology may have an effect on whether the site poses an actual or potential threat to the source.

The DEP's Chapter 21E program relies on licensed site professionals (LSPs) to oversee cleanups at most sites, while the DEP's Bureau of Waste Site Cleanup (BWSC) program retains oversight at the most serious sites. This privatized program obliges potentially responsible parties and LSPs to comply with DEP regulations (the Massachusetts Contingency Plan – MCP), which require that sites within drinking water source protection areas be cleaned up to drinking water standards.

For more information about the state's OHM site cleanup process to which these sites are subject and how this complements the drinking water protection program, please visit the BWSC web page at <http://www.state.ma.us/dep/bwsc>. You may obtain site -specific information two ways: by using the BWSC Searchable Sites database at <http://www.state.ma.us/dep/bwsc/sitellst.htm>, or you may visit the DEP regional office and review the site file. These files contain more detailed information, including cleanup status, site history, contamination levels, maps, correspondence and investigation reports, however you must call the regional office in order to schedule an appointment to view the file.

The table below contains the list of Tier Classified oil and/or Hazardous Material Release Sites that are located within your drinking water source protection area.

Table 1: Bureau of Waste Site Cleanup Tier Classified Oil and/or Hazardous Material Release Sites (Chapter 21E Sites) - Listed by Release Tracking Number (RTN)

RTN	Release Site Address	Classification	Town	Contaminant Type
1-0012344	Getty Service Station	Tier IC – Phase IV	Granby	Oil
1-0000646	Inter All Corp.	Class C - RAO	Granby	--

For more location information, please see the attached map. The map lists the release sites by RTN.